

What Is Claimed Is:

1. A cap device that is detachable to a tank opening, the cap device comprising:

a closer that closes the tank opening;

5 a handle mechanism that is operable to open and close the tank opening;

a disk-shaped torque member that is rotatably mounted on the closer, the torque member being configured to transmit rotational torque applied to the handle mechanism in a opening and closing direction to the closer; and

10 a plate attachment mechanism that rotatably attaches the torque member to the closer,

wherein the plate attachment mechanism is configured such that part of the torque member is elastically deforms by an external force applied to the handle mechanism, thereby detaching the torque member from the closer.

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2. The cap device in accordance with claim 1, wherein the plate attachment mechanism includes a first engagement element disposed on a circumference of the torque member to be elastically deformable, and a second engagement element disposed on a circumference of the closer, the
20 second engagement element being configured to engage with the first engagement element.

3. The cap device in accordance with claim 2, wherein the first engagement element includes interlocking claws arranged along an inside
25 rim of the torque member, and the second engagement element includes an interlocking recess formed around an upper outside rim of the closer, the

interlocking claws being elastically deformed to be fitted in the interlocking recess, so as to rotatably support the torque member on the closer.

4. The cap device in accordance with claim 1, further comprising a
5 handle attachment mechanism, the handle attachment mechanism being configured to rotatably support the handle mechanism on a circumference of the torque member.

5. The cap device in accordance with claim 4, wherein the handle
10 mechanism includes a handle, and a cover joined with the handle and defining an upper circumference of the torque member, and

the handle attachment mechanism includes a cover engagement element formed on an inner wall of the cover and a torque member engagement element formed on the torque member to engage with the cover
15 engagement element.

6. The cap device in accordance with claim 5, wherein the cover engagement element has support projections formed on an inside wall of the cover, and the torque member engagement element has an interlocking
20 recess formed around an outside rim of the torque member, the interlocking recess being configured to engage with the support projections, so as to rotatably support the cover relative to the torque member.

7. The cap device in accordance with claim 1, wherein the torque
25 member includes a frangible portion that is readily breakable by external force applied to the handle mechanism.

8. The cap device in accordance with claim 7, wherein the frangible portion includes frangible grooves arranged along an outside rim of the torque member, the frangible portions being configured to be breakable by a weaker force than other parts of the torque member.

9. The cap device in accordance with claim 8, further comprising a handle attachment mechanism that is configured to rotatably support the handle mechanism on a circumference of the torque member, the frangible grooves being arranged around on an inner circumference of the handle attachment mechanism.

10. A cap device that is detachable to a tank opening, the cap device comprising:

- a closer that closes the tank opening;
- a handle mechanism operable to open and close the tank opening;
- a disk-shaped torque member that is rotatably mounted on the closer, the torque member being configured to transmit rotational torque applied to the handle mechanism to open and close the tank opening to the closer; and
- a plate attachment mechanism that rotatably attaches the torque member to the closer,

wherein the plate attachment mechanism is configured such that part of the closer is elastically deforms by an external force applied to the handle mechanism, thereby detaching the torque member from the closer.